

CLAIMS

What is claimed is:

1. A vehicle seat and headrest assembly, comprising:
a seatback frame;
a headrest assembly having a cushion portion and an impact target, wherein the headrest assembly is rotatably connected to the seatback frame, and wherein a rearward force upon the impact target causes the cushion portion to rotate forwardly;
a headrest assembly biasing member operatively connected to the headrest assembly and the seatback frame for biasing the headrest assembly against rotational movement; and
a locking mechanism operatively connected to the headrest assembly and the seatback frame, the locking mechanism movable between an unlocked position wherein the headrest assembly is permitted to rotate, and a locked position wherein the headrest assembly is prevented from rotating.
2. The vehicle seat and headrest assembly according to Claim 1, wherein removal of the rearward force upon the impact target causes the cushion portion to rotate rearwardly;
3. The vehicle seat and headrest assembly according to Claim 1, wherein the locking mechanism includes a plurality of locked positions.
4. The vehicle seat and headrest assembly according to Claim 1, wherein when the locking mechanism is in the locked position the headrest assembly is prevented from rotating rearwardly.

5. The vehicle seat and headrest assembly according to Claim 1, wherein the locking mechanism comprises:

a ratchet attached to one of the seatback frame and the headrest assembly;

a pawl attached to the other of the seatback frame and the headrest assembly, wherein when the pawl engages the ratchet, the locking mechanism is in the locked position, and wherein when the pawl does not engage the ratchet, the locking mechanism is in the unlocked position; and

a paddle attached to one of the seatback frame and the headrest assembly, the paddle being in engagement with one of the ratchet and the pawl to move the one of the ratchet and the pawl, wherein a rearward force upon the paddle moves the locking mechanism to the locked position.

6. The vehicle seat and headrest assembly according to Claim 5, wherein removal of the rearward force upon the paddle causes the locking mechanism to move to the unlocked position.

7. The vehicle seat and headrest assembly according to Claim 5, wherein the pawl is movably mounted to the seatback frame.

8. The vehicle seat and headrest assembly according to Claim 5, wherein the pawl is slidably mounted to the seatback frame.

9. The vehicle seat and headrest assembly according to Claim 5, further including a paddle biasing member biasing the paddle against the pawl, thereby biasing the pawl away from the ratchet and moving the locking mechanism to the unlocked position.

10. The vehicle seat and headrest assembly according to Claim 9, wherein the paddle biasing member is operatively connected to the paddle and to the seatback frame.

11. The vehicle seat and headrest assembly according to Claim 9, wherein the paddle biasing member is a spring.

12. The vehicle seat and headrest assembly according to Claim 5, wherein the paddle is disposed higher on the vehicle seat than the impact target.

13. The vehicle seat and headrest assembly according to Claim 5, further including a pawl biasing member biasing the pawl toward the ratchet.

14. The vehicle seat and headrest assembly according to Claim 13, wherein the pawl biasing member is operatively connected to the pawl and to the seatback frame.

15. The vehicle seat and headrest assembly according to Claim 13, wherein the pawl biasing member is a spring.

16. A locking mechanism for a vehicle seat and headrest assembly, the headrest assembly having a cushion portion and being rotatably connected to a vehicle seatback frame, wherein a rearward force upon the headrest assembly causes the cushion portion to rotate forwardly, and wherein the locking mechanism is operatively connected to the headrest assembly and the seatback frame, the locking mechanism comprising:

a ratchet attached to one of a vehicle seatback frame and a vehicle headrest assembly;

a pawl attached to the other of the seatback frame and the headrest assembly, wherein when the pawl engages the ratchet, the locking mechanism is in a locked position wherein the headrest assembly is prevented from rotating, and wherein when the pawl does not engage the ratchet, the locking mechanism is in an unlocked position wherein the headrest assembly is permitted to rotate; and

a paddle attached to one of the seatback frame and the headrest assembly, the paddle being in engagement with one of the ratchet and the pawl to move the one of the ratchet and the pawl, wherein a rearward force upon the paddle moves the locking mechanism to the locked position.

17. The locking mechanism according to Claim 16, wherein removal of the rearward force upon the paddle causes the locking mechanism to move to the unlocked position.

18. The locking mechanism according to Claim 16, wherein the pawl is slidably mounted to the seatback frame.

19. The locking mechanism according to Claim 16, further including a pawl biasing member biasing the pawl toward the ratchet.

20. The locking mechanism according to Claim 16, further including a paddle biasing member biasing the paddle against the pawl, thereby biasing the pawl away from the ratchet and moving the locking mechanism to the unlocked position.